

## **A Collection of Tributes to Prof. T Madhavan (1941-2021)**

**By Prof. Errol D'Souza**

Dear Community Members,

With profound sorrow I share with you the news of the demise of Prof. T. Madhavan. He was in the P&QM Area at the institute from 1980 to 2003 when he superannuated. He will be remembered for his sincerity, availability at a moment's notice for addressing student difficulties, and a warmth with which he interacted with colleagues and institute officials.

Regards,

Errol

**By Prof. Jahar Saha**

Prof T Madhavan had an M. Sc degree from Madras University. His first job was as a lecturer at PSG College of Engineering, Coimbatore in the Department of Mathematics. While he was with PSG college, he came to IIMA as a participant in a summer programme in Operations Research. He drew the attention of the faculty as a very suitable candidate for FPM. At the suggestion of the faculty members, Madhavan applied for the FPM. He was selected, and he joined the Fellow Programme in 1975. If I remember correctly, he joined the Institute in 1981 as a faculty member. Initially, he joined as a member of the Center for Management in Agriculture, and later on, he became a primary member of the P & QM Area.

Madhavan worked on the optimal location of facilities in the context of rural development, particularly with more than one objectives. He came up with a way of handling the problem and designed a computer programme for the method.

Madhavan was a wizard in Mathematics. Whenever anyone faced any problem in the subject, Madhavan was there to help. It was amazing how he remembered any complex mathematical formulae or theorems.

Everyone would recall Madhavan as a very helpful soul. As a student, he used to help those we were dreading MSM courses. He would help any campus children wanting help in Mathematics. Despite his own academic pressure, he took over the operation of the students' store. He decided to open it up to the entire campus community. He added newer items to the store. One could ask for any item, not in the store, and Madhavan' Students' Store would procure it. A big help to the community because those days, there was hardly any store around the campus. If my memory is right, he initiated the computerisation of store operation to improve its efficiency.

Madhavan shied away from anything which would improve his "biography". I used to ask him to publish his thesis for publication. With his characteristic smile, he would tell me, you know Professor Saha, I do things because they have to be done, not to gain anything personally. I suggested that he should go to international conferences and make presentations on some of his own work. He said, what is the point? Prof Mote could convince him to be his co-author for the book, Introduction to Operations Research. The teachers would remember him for this book.

Madhavan was a Sanskrit scholar. He had read many of our scriptures and knew them by heart. On the Saraswati Puja day, Madhavan would come to our house for the Puja and recite the Saraswati Vandana. It created a very serene atmosphere. Many a time, Prof Mote would ask him for a shloka, Madhavan would give one which would aptly suit the emotion Prof Mote had in mind. He is unparalleled to most I have known.

Madhavan believed in a modest living, and he practised it. Some said he was saintly. I would say he was a very religious and pious person.

Mrs Snehalata Mote, wife of Prof VL Mote sent me the following message:

"Prof Madhavan was so often in our house, helping my husband with researching mathematics problems. He was a great Sanskrit scholar and Prof Mote would often ask him to find some obscure shlokas. Prof Madhavan would read complete volumes of various epics and find the shlokas. He was a dedicated teacher and taught my daughter(Sharmila) mathematics but also chemistry which was not his subject. He ensured that she studied when he had to travel to Chennai by creating up mock exam papers for her. He also helped Bhagyashree with her computer courses. Prof Madhavan helped my husband with income tax and created an excel sheet which Dr Mote really appreciated and always used. He was a very simple person. Even when Dr Mote said he would help him with a car and driver to work with Income Tax consultants he insisted on going by auto rickshaw. Prof Madhavan remained a non-smoking teetotaler in spite of Prof Mote trying to get him to change his mind every day for over 30 years. Prof Madhavan was a dedicated teacher, a great friend to my husband, a kind and humble person. He will be missed."

### **By Prof. M Raghavachari**

Our family and I were shocked to learn of the sudden and sad demise of Professor Madhavan. Madhavan's association with IIMA began with his participation in the University Teachers Program on Operations Research organized by P & QM area in the early 1970's. Then he joined the IIMA FPM program in the area of P & QM. After completing the FPM, he was hired as a faculty member with primary membership in CMA and secondary membership in P & QM area. He was the first to break the unwritten barrier of recruiting FPM graduates being hired immediately after their graduation. His appointment opened up the gates to hire them in other areas. He

retired in early 2000 and remained in Ahmedabad to enable him to be close to IIMA. Prof. Madhavan's contributions to IIMA are immense. His research was in applying quantitative tools to problems in agricultural and rural management. After I left IIMA in 1984, Madhavan took over the teaching of the popular course SMDA (Stat Methods for Data Analysis) and he did this admirably till his retirement. He was always available for consultation and providing help to students and colleagues. He stayed in his office till the wee hours of morning and I think that he slept there sometimes.

To him, IIMA was his life. He worked on the admissions committee for several years and I believe he developed a system for decision making through computers. Recently he co authored a book with Dr. Mote on Operations Research.

Apart from his professional contributions, what distinguished him from others was his strength of personality. Self effacing by nature, he sought neither favors nor recognition. He was always in the background and he never talked about his achievements. In my long association, I never heard him complain about anything. He was easily available to help his colleagues, students, and staff. He was an active member of the IIMA staff society. He even helped the needy staff with financial help. He was truly a karma yogi.

Personally, it is a big loss for myself and our family. We considered him a part of our family. Our children Vindya and Mukund loved to hear stories from him. To them, he was Uncle Madhavan; they were deeply attached to him. They loved to hear Detective Sambu's funny stories. Madhavan never failed to send birthday greetings to each one of us in our family. In short Professor Madhavan represented the best of men, and I consider myself fortunate to have close association with him. The IIMA community will miss him a great deal.

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### **By. Prof. N. Ravichandran**

I met Dr. Madhavan in 1980, for the first time, before I came to IIM Ahmedabad. This was through a common colleague of Madhavan from PSG College at Coimbatore who was pursuing a PhD in IIT Madras at that time. In some sense, Madhavan is responsible for motivating me to apply for a faculty position at IIM Ahmedabad. He personally carried my CV to the institute. We met at the PhD student hostel of IIT Madras when he visited his former colleague and friend. I was then introduced to Madhavan who had just joined as a faculty at IIM Ahmedabad. Madhavan was very receptive to the idea, proposed by his friend, of carrying my CV to IIM Ahmedabad to explore suitable employment opportunities.

I was subsequently offered a faculty position at IIM Ahmedabad. It was Madhavan who came to the train station to receive me when I reached Ahmedabad. He made sure that my first few days in the institute were very comfortable. He helped me carry my large trunk from the basement of the dormitory to the third floor where I was given a room for a few days. Madhavan was a constant source of encouragement in all academic matters related to teaching Mathematics and Statistics for management courses. He was always available to help me in terms of academic matters, but he

also ensured that my dependency on him was minimized and therefore, he encouraged me to be independent and self-supporting.

As mentioned by several others, he was a humble and a simple person. For him, what mattered more was work and not necessarily, the rewards. He was at ease with working in many doyens in the institute starting from Professors. Nitin Patel, V.L Mote, M. Raghavachari, A.H Kalro, P.M Singhi and several other next generation faculties at IIMA.

He started his career in IIM Ahmedabad in the Centre for Management of Agriculture (CMA) area and eventually moved to the P&QM area. He was a constant companion to Professor V.L. Mote in all his academic endeavors. His hard work and dedication are seen in the book authored by V.L.Mote and Madhavan on Operations Research. This book is one of the outstanding books on the topic in the Indian context.

Madhavan co-taught (with Raghavachari) the course on Statistical Methods and Data Analysis a second-year elective course. After Raghavachari left the institute to settle down in the U.S.A., Madhavan took over the course and did whatever was possible to make the course exciting and useful to the students. As an extension to this, he got involved in an Executive Education connecting data analysis with market research which was coordinated by Professor A.K. Jain. Unfortunately, I did not had the privilege of collaborating with him on any project. I have been a beneficiary of his wisdom, knowledge and technical abilities on many occasions.

Madhavan was a computer geek. He knew everything about the technology. He had mastered the features of the technology. His housekeeping was remarkable. If you went to his office, you would find that every file and book was properly kept in its appropriate place. In order to keep the electronic files on his computer intact, he would spend hours and hours organizing them.

If I ever called him on his phone and said, "I want to come to your office to discuss something", he would immediately say, "Please don't come; I will come to your office." Within a few minutes, he would be in my office, ready to provide the help that I needed and then he would quietly vanish without making even a reference to it.

Madhavan regularly participated in the social gatherings organized on the campus on Saturdays to recite Vishnu SahasraNama. At the end of the recital, there would be a short religious discourse. Madhavan did this every Saturday. He would come meticulously prepared for this religious discourse. He would have handwritten notes ready and he would read out the speech from those handwritten notes.

During one of the convocation ceremonies at IIMA when Pradeep Kandwala was the Director, there was an unexpected thunderstorm (which lasted a few minutes) when the convocation procession started from the dorms to Louis Kahn Plaza. As a result, many arrangements that were made for the ceremony were disturbed and impacted by this. Although the thunderstorm lasted only for a few minutes, there were several volunteers who had gathered to restore Louis Kahn Plaza for the convocation.

Madhavan was the first person to get hold of a broom and started sweeping the floor at Louis Kahn Plaza. I very vividly remember this scene even today and I cannot imagine anybody who can be humbler than him.

Apart from his expertise in statistics, management and computer science, Sanskrit Madhavan was Well versed in astrology and he occasionally shared his insights on this subject with close friends.

Madhavan would do anything, for his students, for his subject, for IIM Ahmedabad. Such personalities, I think, are very rare.

The passing of Madhavan is a huge personal loss to me. He will be very fondly remembered by the members of my family. I have lost a mentor, advisor, guide and a friend..

May his soul rest in peace..Ravi

### **Samir K Barua**

We were neighbors residing in adjacent houses on campus, with the front and the backyards, separated by a hedge. As I shut my eyes and remember Madhavan, memories flood my mind.

We were contemporaries at D16, the dormitory that housed the doctoral students at IIMA. We belonged to the same area, known those days as Production & Quantitative Methods (P&QM) Area. Madhavan was my senior, having joined the doctoral program a year before I did in 1976.

My interaction with Madhavan were limited in student days. In addition to being a wizard in statistics, I knew him as a person who managed the students' store on campus largely by himself.

On numerous occasions I would see him get down from an autorickshaw and carry heavy bags filled with goods up the path and the stairs to the store on the first floor of a Dorm. He would never ask for help to lug the bags but would accept help offered with a smile, gratitude written all over it. Words were so unnecessary.

We joined the institute faculty in 1980, within months of each other. While I joined the P&QM Area, Madhavan initially joined the CMA (Centre for Management of Agriculture) and later took a transfer to the P&QM Area, where he truly belonged. My first professional association with Madhavan came when we served on the Admission Committee for the PGP (Post Graduate Programme) in Management. Madhavan and I were put in charge of framing questions for the Quantitative Methods and the Data Interpretation sections of the CAT (Common Admissions Test). In no time I realized that Madhavan was a fountainhead of ideas. He would conjure up questions that would truly test the understanding of the candidates. My contribution to the process was soon relegated to one of wording the questions and the suggested answers properly and removing some questions that I felt tested the understanding of the candidates a little too much! The two years I worked with Madhavan on admissions added to my ability to see the world through quantitative reasoning.

Though we were neighbors, we would rarely run into Madhavan. He came home only to eat and sleep. Rest of the time, he would be either in his office or minding the students' store or helping some hapless students with intrigues of Mathematics and Statistics. We will have to coax him to join us sometimes for a meal. He would come punctually, have his meal, and leave immediately. There would be little socialization. On occasions I would try to hold him back by requesting him to sit for a while. However, I soon realized the futility of holding him back. He would sit with me due to

my insistence but say nothing. Finally, I asked him why he was in a rush all the time. With a disarming smile, he said, 'There is so much to do and so little time.' We soon accepted him as a wonderful person, with a charming smile, and with little conventional social skills.

As neighbor, I vividly recall one episode. Early morning one day, we heard Madhavan scolding someone loudly enough to be heard by us. As it was so unusual, we (Alka and I) went out and found that the newspaper boy was being scolded. After the boy was permitted to go, we asked Madhavan what had happened. We learnt that despite instructions to the contrary, the newsboy had stopped delivering Economic Times (ET) as the boy had realized that Madhavan was away (on his annual summer vacation). The newsboy's defense was that after being able to shove the papers under the front door for several days, he was unable to do that any further as the papers inside had clogged the opening under the door. Madhavan's argument was that instead of stopping delivery, he should have shoved the papers under the huge backdoor to the living room or the kitchen door. I was curious about why Madhavan wanted to ensure uninterrupted delivery of Economic Times. When asked Madhavan confessed that he rarely read the paper. He however subscribed to the paper as a repository of primary source of data on stock prices and companies. Surprised, I asked, 'But why would you need that data? You have no interest in stock market or finance.' He said, 'I store them as the editions of Economic Times kept in the library are frayed and are difficult to extract data from. I can supply the old ET to anyone who may need them.' He invited me to see his stockpile of neatly stacked editions of ET that occupied the living room, part of the kitchen and the bedroom! As I worked on capital markets, I knew where to go if I was looking for data on companies and stock prices. I benefited on several occasions from Madhavan's stockpile.

In the eighties, I worked with Madhavan on two large advisory assignments. One was in the cooperative textile sector and the other was in the Petroleum sector. The assignments were difficult, particularly the latter, where it was necessary to work with large data. In those days, handling and processing large data was not as easy as now. We were building a large optimization model. While formulating the problem and interpreting the results was my forte, it was Madhavan who coaxed MS Excel to manage the data and make it ready for input to an optimization program (CPLEX, if I recall the name correctly). We would work closely, to try out various modelling options. It took us several weeks to complete the assignment. I realized that the assignment was worth converting into published work, an applied paper, and a case on optimization. I even wrote up the initial drafts of the paper and the case and gave them to Madhavan for his comments. I never got any response from Madhavan. Once the assignment was over, the commitment had been fulfilled. He had no interest in publishing as that did not matter to him in the least. I too lost interest after some time. Before I retired from the institute in 2016, I casually asked Madhavan whether he had the clearance letter we had received from the organization to publish, based on the assignment. In less than 48 hours, Madhavan mailed to me the scanned copy of the permission letter. The unpublished drafts are still with me – somewhere in the pile of papers I carry – as reminder of a great academic, who never hankered for conventional academic glory.

The year was 1988. We were headed to the US, where I was to work for a year as visiting professor in a university, on leave from the institute. I had gone ahead; Alka and Dumpy were to follow. One evening while I was away, Alka ran into Madhavan who asked Alka, 'When are Dumpy and you planning to leave for US?' In a mood to have fun with Madhavan, a (jokingly) serious faced Alka told Madhavan, 'I have to arrange for funds to travel to the US.' Madhavan looked a little nonplussed and did not say anything in response. The next morning, there was a knock on the door and Alka

found Madhavan standing on the threshold. She had forgotten entirely about the conversation she had with Madhavan the previous evening. He came in and very solicitously whispered to Alka, 'I can give you whatever funds I have, to help you travel to the US.' Alka immediately recalled the conversation she had with Madhavan. It took a while for Alka to convince Madhavan that there was no funding problem and what she had said was said in jest. That is how Madhavan was. Always ready to help, unasked, with everything he possessed.

The nineties witnessed addition of a new compulsory course, Mathematics and Statistics for Management III (MSM III), in the first year of PGP. The 15-session course was on classical statistics that covered probability distributions and statistical inferencing. Madhavan and I were to offer the course. Madhavan was to be the lead and I the rookie instructor. I had never done a formal course on statistics. My exposure to the subject was through its application to decision making and quality control. The dozen years I co-taught the course with Madhavan were game changer for me. I started studying statistics to prepare myself for the course. As I progressed in 3 my understanding of statistics, with help from Madhavan, I realized the mastery he had over the subject. He would be able to derive the most abstruse results, starting from first principles. I had never found anyone with that kind of thorough knowledge of the subjects they taught. The learning from Madhavan while teaching MSM III was the foundation for my comfort with statistics that proved of immense value to me as an academic. And the knowledge was imparted to me through an unobtrusive process of osmosis by Madhavan.

The year was in the second half of nineties. I had lost my dad. And mom had chosen to live alone at Nagpur. Madhavan and I were travelling to Nagpur for some data collection. I was planning to stay with mom. Madhavan readily accepted my invitation to stay with her too. He was going to be in Nagpur just for two nights. Mom was happy to not only have her son stay with her, but also a friend of his. The first thing she wanted to know was what would he like to eat. Madhavan simply said, 'Whatever you cook is okay with me.' I suddenly recalled that Madhavan preferred not to eat cauliflower. I told mom that other than that and of course no non-vegetarian food, he was okay with all items. The evening dinner on the first day was a feast as mom prepared a range of items. Madhavan ate everything he was served, without saying a word. My mom could not help asking him whether he liked the food. Madhavan said yes with a smile and added that he had particularly liked the raita she had made with grated carrots. Mom was happy to share the recipe with him, as he told her that he would make that item in Ahmedabad too, as he cooked his own food. By the time Madhavan left, recipes for several items were exchanged between mom and Madhavan, with Madhavan telling her how he cooked his *rasam* and *sambhar*. In those less than 48 hours, Madhavan developed a bond with my mom that would last forever. Later, whenever mom would visit us at Ahmedabad and Madhavan came over for a meal, carrot raita would always be on the menu.

The year was 2000. Dumpy had Sanskrit as a subject. The school did not have a Sanskrit teacher. The kids were asked to study on their own. As the marks in Sanskrit were not included in the mark-sheet, no one paid much attention to the subject. A couple of weeks before the exam, Dumpy happily informed us that he would probably get a zero in Sanskrit. And while Sanskrit did not figure in the final marks-sheet, passing was necessary. Neither Alka nor I had studied Sanskrit and therefore were in no position to help Dumpy at such a short notice. Madhavan was the answer to the problem we faced. I called up Madhavan to find out whether he could accommodate spending some time with Dumpy on Sanskrit over the next few days. He readily agreed and set up one hour a day from the very next day. As arranged, Dumpy would hop across the hedge with his Sanskrit book to Madhavan's house every day. On

return, the first day, he informed us that the book had not been opened. Instead, Madhavan had recited several 'shlokas' in Sanskrit and translated them into English for him. He also told him several stories with Sanskrit words and phrases woven into the story telling. I got worried by the fifth day, when I was told by Dumpy that the book had still not been opened. Dumpy told us, 'I feel very spiritual after spending time with Madhavan uncle.' The lessons continued till the day before the exam. On the last few days before the exam, Madhavan asked Dumpy to open the book and read the chapters, which he could quite easily. Dumpy could also understand on his own what he read. He could also answer the questions posed at the end of the chapters in Sanskrit, with a few mistakes that Madhavan corrected, explaining to him why he had made those mistakes. Madhavan's parting words to Dumpy, on the eve of the exam were, 'You are ready'. Dumpy scored 94/100 in the exam, vindicating the circuitous process of instruction Madhavan had adopted. That was Madhavan's style of teaching, often to the exasperation of students, parents and colleagues who looked for quick solutions and answers.

I became Director of the institute in 2007. Madhavan was still with the institute, post retirement, as visiting faculty. He continued to teach Statistical Method and Data Analysis (SMDA), a course 4 that trained generations of students to draw inferences from data for practical applications and academic research. I was happy to continue the arrangement as Madhavan was an invaluable asset to the institute. A couple of years into my directorship, I started receiving disquieting feedback on Madhavan's classes. Apparently, his hearing was compromised, and students found it difficult to deal with that in the classroom as he would not hear the questions asked or the answers given. I requested Madhavan for a meeting. He came. I asked him whether he had any hearing difficulty. He could not hear my question, sitting across the table, as I had asked the question softly. On repeating the question, a little loudly, he replied that he did have some difficulty, but it was not serious. I suggested that he should think of using hearing aid. He looked at me and conveyed that he was not inclined. I said, 'Madhavan, wearing a hearing aid is no different from wearing specs, which you do.' I informed him that there had been complaints from students on this count. I suggested that he should think about using a hearing aid. He did not reply. I also told him that he should see me more often. He said, 'No. You must be so busy now. I would not like to disturb you.' I told him, 'Madhavan, you are always welcome. No matter how busy I am. Do see me, whenever you have the time.' I had to let him go when he turned 70.

Madhavan had become an institution in his lifetime. With his dissociation, the institute lost an institution that epitomized the best the institute offers. After 2011, my meetings with Madhavan became increasingly less frequent and more fleeting. I could see that age was catching up with him. The unstated affection for me had remained intact. The last meeting, I recall with him was when he informed me that he was writing a book with Dr. Mote. I was overjoyed. I said, 'Wonderful, Madhavan. You are finally doing what you should have done much earlier. You should next write a book on SMDA – convert your notes into a book.' A childlike smile lit up his face on my response. He appeared happy and at peace with the world.

I had not met Madhavan for over two years. The virus has made the world so insular that one does not meet even one's neighbors. Just a couple of weeks ago, as we took our morning walk, and went past the colony where Madhavan lived in Ahmedabad, I told Alka, 'I need to find out about Madhavan. Maybe he has gone back to Chennai.' And then I got the news that Madhavan was no more. I felt utterly shattered. Mysterious are the ways of the Almighty. Why was I not given an opportunity to say my final good-bye? The consolation I have is in the belief that wherever he is, Madhavan is at peace with himself while selflessly helping those around him.



## **Prof. G. Raghuram**

I had penned some thoughts about my association with Madhavan, as he continued his journey. But in Madhavan style, I was not sure whether and what to share. Samir's poignant writing about their beautiful friendship was an inspiration for me to pen a little more and share.

I first came to know of Madhavan ('Madhavar' as I often used to call him, out of respect - In Thamizh, the 'ar' ending connotes respect over the 'an' ending) when I was a student of the 1976-78 PGP batch. It was then more an ethnic connection. His presence in the Student Stores made me volunteer on a couple of occasions at the store. When I continued for a year more at IIMA as a Research Associate, before going abroad to do my PhD in August 1979, I was asked to be a part of the Preparatory programme in June 1979 for the 1979 entering batch, Madhavan as an FPM student was also part of it. We worked together, enjoying the aspect of synchronising our syllabus, constructing problems for class work and tests in the programme. We also enjoyed a bit of discovering Sanskrit together, me a novice and he an expert.

When I came to India in December 1980 during the Christmas break, I made it a point to visit IIMA to stay in touch, since I was keen on returning to India (and if possible, to IIMA). I landed up on campus, with no prior arrangements for stay, but with confidence something would work out. Madhavan and I crossed ways. We acknowledged each other. He welcomed me to campus and asked where I was staying. When I said I still have to figure it out, he just took my bag and said that I should stay with him. He had by then become a faculty and had moved into the T houses. I enjoyed his hospitality for the couple of days I was there. I remember his emphasising that I should come back to IIMA and that 'sky would be the limit' for professional contribution and enjoyment.

I was back in IIMA in 1985. Though I joined the Public Systems Group, I taught courses in the Production and Quantitative Methods Area. And some with Madhavan, He was always a team player. Apart from the intellectual part of preparing jointly for classes, creating questions, he always ensured the final details in execution, be it formatting a quiz on the computer, making copies, distributing material etc. He simply took the responsibility, in spite of the feeling that the sharing was uneven.

I stayed outside campus (like many new faculty those days) before getting a campus house allotment. The year I got the allotment, there was a gap of a couple of months between my having to vacate the outside house and being able to move into the campus house. Besides I had to travel for a part of that period. I felt comfortable asking Madhavan if I could leave my household stuff in his house. He was spontaneous in insisting that I should do so. He wanted a few hours to clear one room and gave the keys to that ground floor room, for me to have direct access.

I remember an occasion when I had come back late at night from an international trip and had a class the next day. Madhavan was a co-instructor. Due to jet lag, I had gone into a deep sleep. After his class, during the break before my class, not seeing me around, he tried calling me. With no response from me, he stood in for me by taking the class. After class, he came over to my home, understanding the situation made it a point to make me feel at ease, and then 'reported' what he had covered, so that I could then take it forward. That was an important aspect of the humanity of Madhavan.

During our teaching together, whenever we talked about some of the poor performances of students in class, he was always of the view that it was effort that was lacking. He would quote from the Gita to the students about the importance and value of effort. Nishkama Karma! He also had stories about how one has to help oneself using available opportunities rather than wait for external intervention. One of my favourites among some of the stories I heard him narrate was about this person (a strong believer in God) crossing what was normally a shallow river when it started to swell due to floods. A swimmer came by and asked the believer if he needed help to get to the banks. He declined, saying God would help him. The waters continued to rise. Soon came a row boat, bobbing in the waters. Seeing our believer in difficulty, the boatman asked him if he wanted to get onto the boat. Our believer again refused, saying God would help him. A motorboat came by, with a person on the boat saying he would throw a lifebuoy for him to hold on to and get on to the boat. Again he refused and said God would help him, The waters continued to rise and he drowned. When he got to meet God, he angrily asked God as to why (s)he did not come to help him. God said I tried to help you thrice, once by sending a swimmer, then a row boat and then a motor boat. You did not accept any of it. So it had to end this way!!

During terms when we did not teach together, we were conscious of each other's presence. In infrequent and short exchanges of conversation on the top floor, we shared aspects about the institute. He was an empathetic listener. When he was the Area Chair, he was ready to execute what others said rather than express a view of how he thought something should be done.

We had an opportunity to work together on a project to study the systems at the Tirumala Tirupati Devasthanams. He was a great partner for this project. Apart from travels to Tirupati, we had opportunities to travel together to a few other temples with a large pilgrim base (Vaishno Devi, Sabarimala, and Shirdi) to understand practices. We wrote a case based on part of the work. Probably the only IIMA case with a Sanskrit couplet! His empathy ran deep. If I was worked up on some promised compiled data not forthcoming at the site, he would also make his unhappiness known to the client. And look for solutions like getting hold of raw data sheets from files and saying we would just have photocopies made and return the same in a few hours. He would then be ready to lead the effort in compiling the data for the required analysis. I remember our final day to complete the report. We did an overnighter. In spite of being younger to him, I needed breaks, while he kept on, exhibiting an inherent stamina. The only chink in his armour was that he was not a good road traveller. Long road journeys made him road sick.

Our ethnic connection got us together on occasions when the Thamizh Sangam in Ahmedabad had events, including plays, where many IIMA staff would be actors. We went together on some occasions and sometimes ate out. Madhavan always enjoyed his food. Be it the in flight service, free meals at the temples (during our project), in a high end restaurant or as an invitee at home. But he never sought such opportunities. I remember when we as Area members went to Agashiye for his retirement. Of course, he enjoyed the food. His only conversation though was how much the institute had given him.

There were remarks about his being calm. My experience is not all the time. I have seen him express anger in empathy. If an auto driver was not being fair on the price and I expressed discomfort, Madhavan would erupt in anger, including a Sanskrit quote on what good service behaviour ought to be! While spending most of his time in the institute, he had a routine of two trips a year to Chennai, once for his father's anniversary and the other for his mother's. We travelled together once and I had a chance to visit him at his Chennai home. I remember him being doted on by his

relatives, for his quiet and giving personality. I was happy to hear that he spent his last days in his nephew's home, at Mumbai, while undergoing medical treatment.

I did not get the chance to meet Madhavan over the past five or more years. It must have been quite something that at this late age, along with his mentor, Prof Mote, he wrote a book on Operations Research, published by Wiley. I am repeating a John Keats quote from 'Ode on a Grecian Urn' that Madhavan had in his eulogy to Prof Mote: "Heard melodies are sweet, those unheard are sweeter." That is a description of Madhavan too.

It was his limited conversation and more often silence, and the Nishkam Karma towards the institute that defined 'Madhavar' to me. I am sure Madhavan, wherever he is, is messaging us the ending lines of the same Keats poetry:

"Beauty is truth, truth is beauty, -that is all  
Ye know on earth, and all ye need to know"

Raghuram

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### **Prof. Sundaravalli Narayanaswami**

Prof Madhavan was very simple and most unassuming. He had recently authored a book on OR with Prof V L Mote, (a 2016, Wiley Publication) and I was one of the many beneficiaries to learn from the book. I have heard several interesting anecdotes about his PGP2 elective, SMDA.

He was a frequent visitor to the campus and we had several moments of light hearted conversations together. We also used to do a Saturday evening Satsang with Prof Madhavan, Mr Gopal and others.

Om Shanti to the dear, good Professor.

Sundaravalli

### **Prof. Arnab K. Laha**

This is very sad news! Prof. Madhavan was one of the humblest persons I have ever met. His sound knowledge of the subject coupled with enthusiasm to learn new things even at an advanced age remains etched in my mind. I remember his great excitement to learn R and use it effectively even after getting introduced to the same after his superannuation. I have met many alumnus who recalled his sessions of QM and SMDA with great fondness and nostalgia.

May his soul Rest in Peace!

### **Prof. Goutam Datta**

I have taught several courses with him, most prominently the QM-II

(now PS-1a) and Project Management. He retired in 2003, when I was the Chair of P&M Area and we had a dinner outside on that occasion in his honour and almost all PQM area members attended that. Even after his retirement, he continued to teach

PS-1a with me (possibly till 2009). I learnt the Dharwar Drilling case from him and he created the PPT.

One of the places he was particularly present was the admissions. He Chair, Admissions and the CAT Chairperson. I used to ask him why he spends so much time with a candidate even if we were not selecting him/her. He replied that these students are coming in contact with an IIMA professor for the first time and they must learn something that they must remember for life. I remember several things that I learnt from him.

Om Shanti to the dear, good Professor.

### **Prof. Rama Mohana Turaga**

Really sad to know about the passing away of Prof. Madhavan. He was my co-instructor in the first PGP stats course I ever taught, in 2011-12. As a rookie teacher and not being a statistician, my life would have been much worse without him (and Prof. Bandyopadhyay, my other co-instructor). I could walk into his office anytime to discuss assignment solutions, teaching plans, or anything else that helped me. I will never forget him for all the generosity he had shown towards me at that time. I always chatted with him whenever we ran into each other on campus - what a pleasant and humble personality! May his soul rest in peace!

### **Prof. Chetan Soman**

Prof. Madhavan offered his services to the P&QM area and the institute for many years even after his retirement. His contributions to CAT, CAT center, and admissions processes at the institute are unparalleled. I remember his evident based lessons for new members of the CAT construction teams e.g. why any puzzle /question involving football or cricket situation is a strict no-no: very few girls attempt those!

He was also interested in trying out many new computing software. He introduced me to one such very interesting, free software: GeoGebra (which, as the name suggests, combines Geometry and Algebra) that makes learning maths fun for kids. I have used the visualization appeal of this software to introduce many, basic OR/OM concepts to MBA students too! Please check it out for your kids/ grandkids, if you haven't heard about it.

May his soul rest in peace.

### **Prof. Satish Deodhar**

Madhavan was my lone next door colleague in an otherwise buzzing hive of Honey Bee Network in Wing 13. His childlike innocence would camouflage his computational and psychometric abilities to generate CAT results and the post-facto IRT analysis of CAT questions. Now, of course, everything is outsourced.

Brick houses are a permanent feature of this campus, at least so far. Periodically they only change their old residents with the new ones. House 421 was one such house lucky to be occupied by one of the most unassuming faculty members - Madhavan.

He belonged to that early period when CMA was a multi-disciplinary group. If late Prof. Shingi was a rural sociologist, Prof. Madhavan did his Ph.D. from P&QM area of IIMA. He worked with another of his colleague from CMA, late Prof. Girja Sharan. Both worked on earth-tube heat-exchange green houses in arid Kutchh region. Later, the technique would get used in Kankaria zoo for animals to beat the hot and cold climate in summers and winters, respectively. Due harvesting for farmers in arid regions was another of their contribution. They also worked on strengthening orchards against cyclones by tying an optimal number of trees at optimal height and optimal rope size on the Gujarat coastline.

We will miss Prof. Madhavan. As the flames consign his mortal remains to Panchatatva, our prayers that his departed Atma is reunited with Parmatma.

### **Prof. Arvind Sahay**

Prof. Madhavan was a fantastic teacher, a very gentle soul but with a biting sarcastic wit, that was also paradoxically gentle. I had been at the receiving end of this wit on one such instance in his famous SMDA class when I flipped the logic to arrive at the exact opposite probability estimate (0.8 instead of 0.2). He asked me if I practiced Shirshaasan regularly... with that smile and twinkle in his eye. It was good to see him on occasion. He was an integral part of the foundational years of IIMA... an era is passing.... May his soul rest in peace.

## **Rajni Sarin PGP 77**

The passing away of Madhavan unleashed a lot of grateful memories from his batch mates with whom he had the first year of the PGP in common.

"How very sad a loss!

He gave me very many tutorials in Maths. I had only done Elementary Maths in ICSE. Such kindness, patience and generosity of time!

At one time soon after the term began (and our one-to-one coaching), he was so much in demand that he asked me if it was okay to form a group for the lessons. I balked and confided to him that I had so much to catch up on that, I'd feel too dumb and embarrassed even asking the many questions I needed to. You can't imagine my gratitude when he just dropped the idea. That is the level with which he could give of himself! Yet, I worried endlessly how he would ever complete his FPM if he kept up with such empathetic indulgences! He seemed older than the other FPM students! Yet in my troubled conscience, when I raised this issue of my unease, he just smiled (and I saw saintliness!) and told me he could adjust to accommodate the time commitment. That sure accelerated my learning curve to release him from my dependency on him.

He was the calmest teacher for one so in need of calming!

RIP dear dear Prof Madhavan!

Some debts, as those to teachers can never be repaid!" -

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**Meenakshi Nayar (FPM 1980)** posted,

"Mr Madhavan, my classmate, was the best teacher I ever had!! Ever so grateful to him for removing my fear of calculus, building my confidence, counselling, cajoling, and relentlessly working with me to do something I believed was irrelevant for an FPM in OB. He helped me stay on. He helped change my life".

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**Freda Swaminathan (PGP 1977)**, also of the same batch, writes "Dear Madhavan, you understood computers when this puzzled the best engineer. Best of all, empathised with those knowing no Math."